Preliminary Flood Outlook Summary for Iowa January 4, 2010

National Weather Service Des Moines, Iowa

This outlook is preliminary. It is based on current conditions as of January 4, 2010. Below is the schedule for this year's official spring flood outlooks for each NWS forecast office.

- 1st Outlook: Friday, January 29, 2010.
- 2nd Outlook: Friday, February 19, 2010.
- 3rd Outlook: Friday, March 5, 2010.
- 4th Outlook (Optional): Friday, March 26, 2010.

The outlooks for the NWS Des Moines service area will be published on its Web page when they become available (http://www.weather.gov/desmoines). Each NWS office updates the probability outlooks their respective service areas every month of the year, around the 1st of every month.

For more information, visit our Web site. You may also contact me at <u>Jeff.Zogg@noaa.gov</u> or at 515-270-4501 x493.

Current hydrologic conditions

- Over half of the flood gauges in Iowa are reporting stream levels of much above normal for this time of year. The rest of the flood gauges are reporting either record high levels or above normal levels for this time of year.
- Soil moisture across all but extreme southwest Iowa is at least above normal. In extreme southwest Iowa it is near normal. Soil moisture across the southeast third of the state is much above normal.
- The snow pack is above normal in Iowa and much of the Mississippi River basin north of Iowa. The greatest snow depths are in northwest Iowa where they are, on average, 20 to 30 inches, or 16 to 24 inches above normal.

Preliminary flood outlook comments

- The risk of flooding is presently greater than normal, on most tributary rivers in **Iowa, to the Mississippi and Missouri Rivers.** The risk of flooding on the Mississippi and Missouri Rivers is near to above normal.
- The risk of flooding, compared to normal, is highest in the river basins whose headwaters are in north central and northwest Iowa. Those basins include the Cedar, Des Moines, Iowa, Wapsipinicon, Little Sioux and Big Sioux.

- These flood outlooks assume normal temperatures and precipitation for the winter season. If temperatures or precipitation are above or below normal, then the rivers may respond differently to what our outlook predicts. The official NOAA three-month outlook for temperature is above normal, and for precipitation is "equal chances." Equal chances means that there is no indication, either way, of having above or below normal conditions. Local tools suggest that cooler than normal temperatures will continue across Iowa through February, with a change to near to above normal temperatures in March. Local tools also suggest near normal precipitation through February, with a change to below normal precipitation in March. If the local tools are correct then the risk of flooding would be similar to what our official guidance presently suggests.
- The evolution of the snow pack, as well as future precipitation events, will have a large influence on potential flooding. We have had years in Iowa which started with high snow packs, but flooding was minimized due to ideal snow melt conditions and below normal precipitation. Thus, in spite of our existing conditions, spring flooding this year should not automatically be considered a "given."
- As always, ice jams are possible and may result in locally higher river stages.

—Prepared by Jeff Zogg, Senior Hydrologist/NWS Des Moines, IA